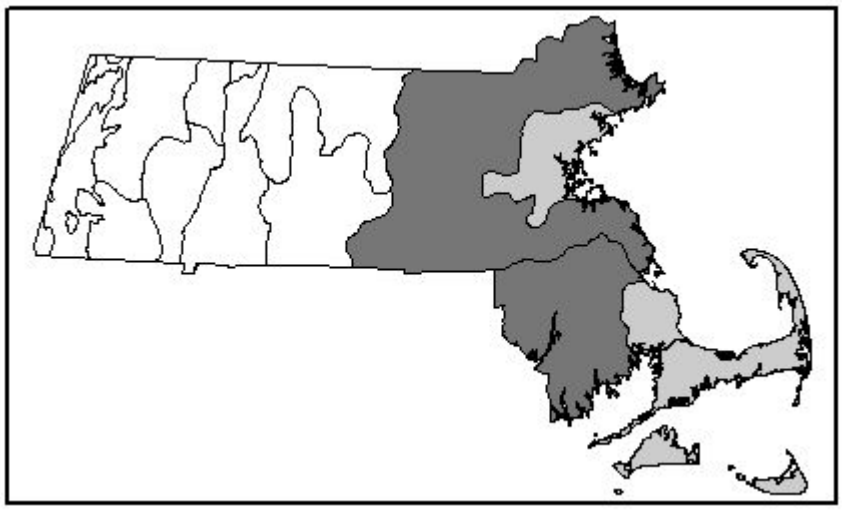
Community Name: **ESTUARINE INTERTIDAL: BRACKISH TIDAL MARSH**

Community CODE: CE2B300000

SRANK: S1



Concept: Mixed herbaceous marsh that is flooded by daily tides, and occurs in brackish reach of coastal rivers. May also occur in smaller patches in upper zones of coastal salt marshes and salt ponds, usually near seepages or freshwater transition areas.

Environmental setting: Brackish tidal marshes occur along free-flowing coastal rivers. Smaller patches often occur along the edges of salt marsh habitat, near stream inputs, seepages or other freshwater transition areas. Tidal amplitude ranges from 0 to 150 cm [comparable to freshwater tidal marshes], while average annual salinity is [0.5] - 5-18 ppt. The community is often structurally diverse, including high marsh and low marsh, with occasional occurrences along rocky shores, seepages, and ditches. Brackish Tidal Marsh, mud flat zone is rich in organic sediments and, grades into adjacent less organic Brackish Mud Flats which are classified as Estuarine Intertidal: Saline/Brackish Flats.

Vegetation Description: Narrow-leaved cattail (*Typha angustifolia*) is typically dominant in the backmarsh, with frequent stands of common reed (*Phragmites australis*). Freshwater cord-grass (*Spartina pectinata*) and saltmarsh bulrush (*Scirpus robustus*) occur along the banks, associated with saltmarsh sedge (*Carex paleacea*) and marsh bentgrass (*Agrostis stolonifera*), which frequently sprawls over the edge. Low marsh supports stands of saltmarsh cord-grass (*Spartina alterniflora*) and threesquare (*Scirpus pungens*). Mudflats and shores support sparse low herbs such as water pimpernel (*Samolus valerandi* var. *parviflorus*), mud lily (*Lilaeopsis chinensis*) and creeping spearwort (*Ranunculus flammula* var. *ovalis*). Plants of freshwater tidal marshes occasionally occur in the higher zones of brackish marshes.

Associations: Massachusetts' brackish tidal marsh communities appear compatible with Connecticut's associations: (Spartina alterniflora - Lilaeopsis chinensis community; Typha angustifolia - Hibiscus moscheutos community; Spartina patens - Agrostis stolonifera community; Scirpus pungens - Sagittaria spp. tall grassland).

Habitat Values for Associated Fauna: This community provides outstanding general wildlife habitat, with abundant food sources for migratory and wintering waterfowl, and is generally associated with river reaches with spawning habitat for anadromous fisheries. Amphibian and reptile diversity is lower than in freshwater tidal communities.

Associated rare plants:

BIDENS EATONII	EATON'S BEGGAR-TICKS	T
CARDAMINE LONGII	LONG'S BITTER-CRESS	E
CRASSULA AQUATICA	PYGMYWEED	T

From: Swain, P.C. & J.B. Kearsley. 2001. Classification of the Natural Communities of Massachusetts. Version 1.3. Natural Heritage & Endangered Species Program, Division of Fisheries & Wildlife. Westborough, MA.

RANUNCULUS FLAMMULA VAR. OVALIS	CREEPING SPEARWORT	-WL
SAGITTARIA SUBULATA VAR SUBULATA	RIVER ARROWHEAD	E
SETARIA GENICULATA	BRISTLY FOXTAIL	SC
SPARTINA CYNOSUROIDES	SALT REEDGRASS	SC

Associated rare animals:

CINCINNATIA WINKLEYI	NEW ENGLAND SILTSNAIL	SC
LITTORIDINOPS TENUIPES	COASTAL MARSH SNAIL	SC

Examples with Public Access: Large examples are known from the North and South Rivers; also occurs on the Palmer, Westport, Paskamansett, Weweantic, Agawam, Mashpee, and Merrimack Rivers, and probably along several other rivers on the north shore. Occurrences along salt marshes are not well documented.

Threats: Invasive species appear to be the primary threat to this natural community. Brackish tidal marshes in several rivers are dominated by common reed (*Phragmites australis*), and purple loosestrife (*Lythrum salicaria*) appears to be more aggressive in brackish marshes than in freshwater tidal marshes.

Management needs: Monitor invasive plant populations, and determine feasibility of control measures.

Synonyms

USNVC/TNC: Includes Typha (angustifolia, domingensis) Tidal Herbaceous Alliance -- Typha angustifolia - Hibiscus moscheutos Herbaceous Vegetation [CEGL004201]; Scirpus pungens Tidal Herbaceous Alliance -- Scirpus pungens Herbaceous Vegetation [CEGL004188]; Spartina alterniflora Tidal Herbaceous Alliance -- Spartina alterniflora- Lilaeopsis chinensis Herbaceous Vegetation [CEGL004193]; Spartina patens - (Distichlis spicata) Tidal Herbaceous Alliance -- Spartina patens - Festuca rubra Herbaceous Vegetation [CEGL006368]; Panicum virgatum Tidal Herbaceous Alliance -- Panicum virgatum Tidal Herbaceous Vegetation [Provisional] [CEGL006150]; Common reed (Phragmites australis) australis Tidal Herbaceous Alliance -- Common reed (Phragmites australis) australis Tidal Herbaceous Vegetation [CEGL004187]; Spartina cynosuroides Tidal Herbaceous Alliance -- Spartina cynosuroides Herbaceous Vegetation [CEGL004195].

MA (old name): Brackish Tidal Marsh [formerly Southern New England and Gulf of Maine].

ME: Similar to: Brackish Tidal Marsh community.

NH: Likely present, not described.

NY: Similar to: Brackish tidal marsh; Brackish Intertidal Mudflats; Brackish Intertidal shore.

CT: Includes Scirpus pungens - Sagittaria spp. Tall grassland; Spartina alterniflora - Lilaeopsis chinensis community; Spartina patens - Agrostis stolonifera community (also high salt marsh); and in part (with salt marsh) Panicum virgatum medium - tall grasslands; common reed (Phragmites australis) australis tall grasslands; Typha angustifolia - Hibiscus moscheutos community.

RI: Similar to: Brackish marsh.

Other:

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